

**REMARKS**

Claims 1-8 are pending in the application. Claims 1-8 have been rejected. Claim 1 has been amended. Claim 8 has been canceled without prejudice or disclaimer. Claim 1 is an independent claim.

The specification stands objected to for failing to meet the formality requirement. In particular, the Office Action indicates that the specification at page 3, line 13, reads awkwardly. In response, applicant has deleted the word “incurs.”

Base claim 1 stands rejected under 35 U.S.C. 103(a) as allegedly being obvious over Peral *et al.* (U.S. Pub. 2002/0076132) (“Peral”) in view of Onaka *et al.* (U.S. 5,696,859) (“Onaka”).

Claim 1 has been amended to incorporate the feature originally recited in claim 8. In particular, claim 1, as amended, recites an optical tunable filter that “performs a vestigial sideband modulation..., wherein the central wavelength of the optical tunable filter is substantially larger than the central wavelength of the optical signals by 0.1 nm.”

Support for the amendment can be found in original claim 8 and the specification, at page 7, line 22 – page 8, line 1 and at page 8, line 18 - page 9, line 2 (See also Figure 5). As noted in the specification, an optical tunable filter having central wavelength larger than the central wavelength of the input optical signal by 0.1nm performs a vestigial sideband modulation (Page 8, line 19-22). Moreover, such filter enables minimization of the fluctuation of the wave shape, improvement in the value of Bit Error Rate, and the reduction in band width of the output optical signal. (Page 8, line 12 - page 9, line 5).

Applicant submits that such an optical tunable filter is not disclosed in either Peral or Onaka. Peral, as read by applicant, merely teaches that its filter may be designed as a side-band filter suppressing at least part of one of the side bands of the modulated optical carrier (0023). Meanwhile, Onaka, as ready by applicant, merely teaches that its filter may serve as a reference in order to avoid large variation of wavelengths in a system with large number of filters (Column 6, line 41-46). However, neither Peral nor Onaka teach that respective filters performs a vestigial sideband modulation by setting the central wavelength of the filter substantially larger than that of the input signal by 0.1 nm. As such, applicant respectfully submits that Peral and Onaka, alone or in combination, do not render claim 1 obvious.

In addition, applicant submits that neither Peral, Onak, nor other documentary evidence, alone or in combination, discloses or shows that amended feature is merely “result-effective” variable, involving only a routine skill in the art.

Accordingly, applicant respectfully submits that claim 1, as amended, is not obvious over Peral or Onaka, alone or in combination, or routine in the art. Applicant respectfully request withdrawal of the final rejection and allowance of the claim.

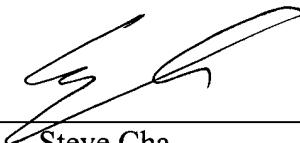
Other claims in this application are each dependent on the independent claim 1 and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration of the patentability of each on its own merits is respectfully requested.

Amendment  
Serial No. 10/617,115

For all of the foregoing reasons, it is respectfully submitted that the present Application is patentable in view of cited reference. A notice to that effect is respectfully solicited. If any issues remain which may be best resolved through a telephone communication, the Examiner is requested to kindly telephone the undersigned telephone number listed below.

Respectfully submitted,

Steve Cha  
Registration No. 44,069



Date: 7/15/05

By: Steve Cha  
Attorney for Applicants  
Registration No. 44,069

Mail all correspondence to:  
Steve Cha, Registration No. 44,069  
Cha & Reiter  
210 Route 4 East, #103  
Paramus, NJ 07652  
Tel: 201-226-9245  
Fax: 201-226-9246

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7/15/05  
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